#### **Guidelines for Structural Reviews**

September 20, 2007

### Plan in Hand Level Review

- 1. Situation and Layout meets all requirements of the Situation and Layout checklist.
- 2. Plans represent acceptable UDOT design practices and presentation.
- 3. UDOT CADD Standards are followed.
- 4. Structures are constructible using traditional construction methods.
- 5. Reviewer professionally and tactfully provides written comments on the standard UDOT Structures Comment Form.

### PS&E Level Review

#### General:

- 1. Plan set represents acceptable UDOT design practices and presentation:
  - a. For example:
    - i. Design of substructure and superstructure elements, including the deck, reflect UDOT design requirements for structural shapes and capacities.
    - ii. Loading and design codes meet current UDOT design practice.
  - b. Design and presentation meet all requirements of the UDOT Structural Design Manual (available end of 2007).
- 2. Plan set clearly communicates intended design.
- 3. Structures are constructible using traditional construction methods.
- 4. Consistency of items and quantities between plans; specifications; engineer's estimate; and Measurement and Payment.
- 5. Geotechnical design parameters used in design are consistent with geotechnical report (if geotechnical report is available during review).
- 6. Reviewer includes a comment that all QC/QA should be completed in compliance with UDOT Structures QC/QA requirements.
- 7. Reviewer professionally and tactfully provides written comments on the standard UDOT Structures Comment Form.

### Plans:

- 1. Situation and Layout meets all requirements of the Situation and Layout checklist.
- 2. All appropriate structural details are included in the plans.
- 3. UDOT CADD Standards are followed.
- 4. Dimensions and call-outs are clear and complete.
- 5. Plan sheet notes use active voice.
- 6. Information correlates between structural plans and non-structural plans.
- 7. Impacts from non-structural items of work are addressed.
- 8. Designs for structures and structural elements are reasonable.

# Specifications:

- 1. Active voice used in specifications.
- 2. Construction schedule is appropriate.
- 3. Specifications are clear and understandable.
- 4. All required structural special provisions are included.

# Engineer's Estimate:

1. Quantities and unit costs for structural items are reasonable.

## Measurement and Payment

1. Payment information for structural items is acceptable.